DOCUMENT RESUME

ED 474 141 CE 084 314

AUTHOR	Aderinto, J. A.; Akintayo, M. O.
TITLE	Managing Distance Education Institutions through Value Chain Analysis: the Nigerian Experience.
PUB DATE	2002-00-00
NOTE	15p.; Light print may not reproduce well.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Coordination; *Cost Effectiveness; Developing Nations; *Distance Education; Educational Administration; Educational Development; *Educational Objectives; Foreign Countries; *Institutional Administration; Marketing of Education; Organizational Objectives; Postsecondary Education; *Strategic Planning; Systems Approach
IDENTIFIERS	Nigeria

ABSTRACT

Value chain analysis can gauge, analyze, and predict organization effects to control cost in light of achieving strategic organization objectives of distance education. Value chain analysis enables organizations to accomplish their goal or mission through cost effectiveness or differentiation. The value chain activity structure in a distance education organization such as Ibadan University or National Teachers' Institute is as follows: inbound logistics, operations, outbound logistics, sales and marketing, and service. Primary activities of these organizations can be further divided into these five discrete chains: (1) course development and production, (2) admission, (3) course registration and materials dispatch, (4) course delivery, and (5) marketing. Managers using value chain analysis are encouraged to systematically consider effects of policies, decisions, and actions on all areas through awareness of interrelationship and linkage throughout the organization and on the organization's value and potential for strategic alliances with suppliers, buyers, and competitors; to determine cost drivers for all activities and their effect on cost, quality, and perceived value of programs, courses, and services; and to make decisions and set policies from a future-oriented perspective. (Contains 11 references) (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 474 141

MANAGING DISTANCE EDUCATION INSTITUTIONS THROUGH VALUE CHAIN ANALYSIS: THE NIGERIAN EXPERIENCE

BY

DR. J.A. ADERINTO

DEPARTMENT OF CONTINUING EDUCATION,

OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE.

AND

DR. M.O. AKINTAYO

DEPARTMENT OF ADULTY EDUCATION,

UNIVERSITY OF IBADEAN, IBADAN.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. Aderinto

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

CE084314

Managing Distance Education Institutions Through Value Chain Analysis: The Nigerian Experience

Abstract

The paper provides a theoretical frame work as a guide to the understanding of the peculiar management of Distance Education by examining the value chain analysis, and its use for effective organisational objectives with particular emphasis on the management of distance education Institutions. Five competitive forces interacting within a given industry and their effects on distance education institutions (Porter, 1985) are examined and discussed. The paper observes that unlike formalised institutions, distance teaching organisation require many actors to bring about effective education through awareness of the interrelationships and linkages found in organisations.

BEST COPY AVAILABLE

MANAGING DISTANCE EDUCAITON INSTITUTION THROUGH VALUE CHAIN ANALYSIS: THE NIGERIAN EXPERIENCE

BY

DR. J.A. Aderinto Dept of Continuing Education,

O.A.U., Ile-Ife;

and

Dr. M. O. Akintayo, Dept. of Adult Education,

University of Ibadan.

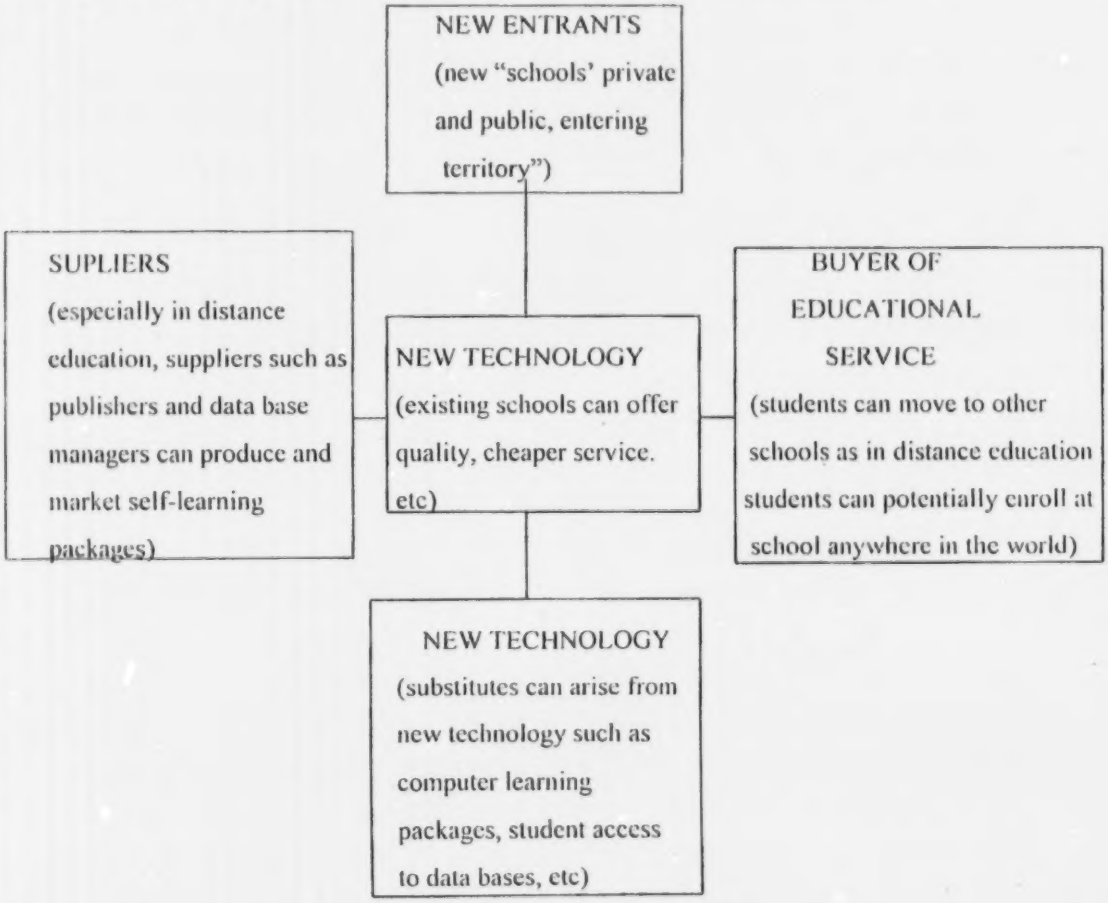
As distance education has expanded rapidly across the globe and has moved to be a "Centre stage" in overall education provision, the lack of a theoretical framework to guide our understanding of its particular management challenges, skills and practices becomes more and more worrisom. Most of the research and documentation concerning management and administration is either narrowly focused on small questions in the practice of management (Merup 1968), speculative (Duke 1986); Harris and Williams 1978; Singh 1975), descriptive (Kaye and Rumble 1981; Lumsden 1986; Rumble 1986), or proscriptive (Dodds 1983). Murgatroyd and Woudstra (1989) suggested that Porter's (1985) value chain is an ideal tool for the analysis and subsequent control of an organisation's performance level. In this paper, attempts are made to look at how value chain analysis can be used to gauge, analyse, and predict organisational effects to control cost int he light of achieving strategic organisation objectives of the distance learning education. The authors use the institutions they are most familiar with the National Teacher's Institute (NTI) and University of Ibadan ESP, for illustration and examples.

Michael Porter (1985) portrays five competitive forces interacting within a given industry. Figure I shows an adaptation of these force to the distance education programme. The competitive forces shown in Figure I can place intense demands on the administrative capability of Distance education institutions

BEST COPY AVAILABLE

to manage costs while ensuring quality education and service. Providers of educational service include the governments, public and private companies, as well as individuals. Buyers demand quality and access, and are puting pressure on current provides of educational services. Their demands and willingness to pay create opportunities for new entrants, particularly those who can use new techniques and technologies not being properly used by existing providers. New entrants are also not encumbered by the weight of "history" and can move quickly. Suppliers can read demand and pressure providers to use their new products, one of which can be very innovative. Suppliers can also by-pass providers and move to provide their educational products and services directly to the buyers.

Figure 1: Competitive Forces in Managing Distance Education.


NEW ENTRANTS
(new "schools' private and public, entering territory")
SUPLIERS
(especially in distance education, suppliers such as publishers and data base managers can produce and market self-learning packages)
NEW TECHNOLOGY
(existing schools can offer quality, cheaper service. etc)
BUYER OF EDUCATIONAL SERVICE
(students can move to other schools as in distance education students can potentially enroll at school anywhere in the world)
NEW TECHNOLOGY
(substitutes can arise from new technology such as computer learning packages, student access to data bases, etc)

Adapted from Porter (1985)

BEST COPY AVAILABLE

While such pressures are felt throughout the post-secondary system, cost control management to enhance efficiency and effectiveness is different for distance teaching organisation for three reasons. First, teaching in organisational terms, is much simpler and less formalised in campus-based institutions than in distance teaching organisation. In campus-based institutions the three components of teaching-course development, course production, and course delivery-are subsumed under the roles of individual academics. In addition, few linkages to other parts fo the organisation are needed for this function to take place. In distance teaching organisations, there are many actors in the process: academics, subject matter experts, editors, instructional designers, graphics designers, technology specialist, tutors, exam invigilators, and the many personnel who keep records, and ship materials, including those who set up examination schedules and so on. Commonly, these actors work in administratively distinct units of the organisation. Thus, in distance teaching institutions, intra-and inter-departmental linkages are critical to efficient and effective education.

Second campus-based institutions are relatively self-sufficient and independent in the performance of their functions They do not place heavy reliance on external agencies to provide their services. This independence is reflected in budgetary expenditures. Typically, 90 percent or more of their operating expenditures are for salary-related costs. In contrast, personnel cost in distance teaching institutions often represent less than three quarters of operating expenditures. This is because distance education organisations rely heavily on outside suppliers (e.g postal and telecommunication services, print shop suppliers, book publishers) to "go to the student".

BEST COPY AVAILABLE

Third, the capital investment require for the campus-based institutions is considerably greater than that required for distance teaching ones. Provision of classrooms requires large buildings, which become a restraining capacity factor to the number of student who can be served. For distance teaching institutions that concentrate on basic correspondence education with tutorial support, the primary capacity constraints is found in the number of qualifies instructors/tutors the institute can afford to hire.

On the Value Chain Analysis

Murgatroyd and Woudstra (1989) distinguished between strategic planning (which focuses on building strengths), and strategic management (which focuses upon competencies needed to cope with uncertainty and to seize opportunity). Murgatroyd 1987) develops this subject further. Central to strategic management is the need to be aware of and pay attention to the factors driving an organisations cost. A vital part of cost consciousness is strategic cost analysis which steps beyond traditional management accounting (Govindarajan and Shank (1988).

The principal concept that Porter (1985) uses to asses the competitive position of an organisation and to understand the strategic influence of value activities and cost drivers is the "value chain analysis. Value chains represent the collection of activities performed by an organisation to design, produce, market, deliver, and support its products. The purpose of this type of analysis is to enable organisations to accomplish their goal or mission through one of two strategies;

(a) Cost effectiveness (providing goods or services at a lower cost than the competition or superior goods or services at an equal cost) or

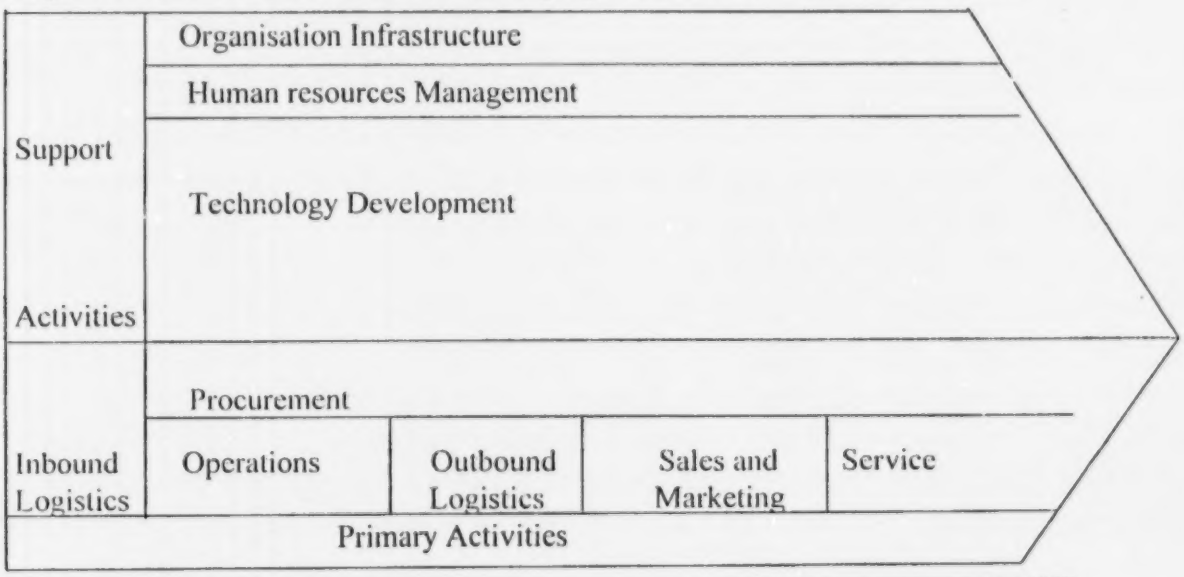
(b) Differentiation (providing goods or services that are valued for their uniqueness or fit a particular buyer's needs). The value chain breaks the organisation into its relevant activities and provides a framework for understanding the behaviour of cost. Decision makers May try to reduce these costs or identify possible sources of differentiation.

BEST COPY AVAILABLE

Value chain activities are not necessarily the same as functional division of labour within departments, since what /who often cut across departmental lines. Value activities are classified as either primary-the activities involved with the physical creation and/or delivery of the product or service - or support activities, which feed both into primary activities and into each other with purchased inputs, technology, human resources, and other organisation-wide functions and services. Organisational functions may not be exclusively primary or support in nature. For example, human resource management technology development and procurement can be associated with specific primary activities however they may also service the entire organisation. The overall primary activity structure in a distance education organisation such as that of Ibadan University or National Teachers' Institute (NTI), Kaduna, can be depicted as follows:

Inbound Logistics. Preparation for course development including curriculum planning hiring of authors, ordering of reference materials including textbooks, and formation of internal course term

Figure 2 Generic Value Chain in Managing a Distance Education Institution



Sources: Adapted from Porter (1985)

Operations. The actual process of course development including writing, editing, formation, graphic design, and printing.

Outbound Logistics. The packaging and storage of courses and the process of mailing or otherwise delivering the material to the students.

Sales and Marketing. The preparation of brochures, advertising and most important, the university calendar. The registration of students can be considered sales as this is where funds change hands for the purchase of the learning materials and the university enters into a contract for tuition and other services with the student. The materials and services together are the products sold by the university.

Service: The counselling and tutoring activities including marking of assignments, course delivery, marking of examinations, and the maintenance of student records.

A value chain analysis of the university of Ibadan ESP or NTI's primary activities, as depicted, brings into focus the main factors determining its competitive position as a distance teaching institution. Its competitive strength lies in it is provision of an integrated educational and service package for students, and not in specific products or services. For example, the course package along is a product that can be fairly easily duplicated by others. When the service fo the tutor, the registry, student advisors, counsellors and academic are added, a strong overall strategic vision of quality, caring, and service, and enviable competition position can be forged. We can further divided the University of Ibadan ESP or NTI's primary activities into five discrete chains.

Course Development and Production. This chain is similar to a publishing company. The course is conceived, written, edited, and printed. The course package is assembled by combining produced and purchased components and made available to the course delivery function, a course purchased from another provider may not enter this chain.

BEST COPY AVAILABLE

Admission. The Admissions chain provides a services to students. Students are admitted to the university or the Institute if they meet all necessary admission requirements.

Course Registration and materials Dispatch. The Course registration and Materials Dispatch Chain begins with the student's application to register for a particular course. Completion fo this process triggers the release of a package of materials, which is sent to the student. The student is also assigned tutorial centres where course materials can be collected or assignments submitted. This process is repeated every time for the student throughout period of studentship.

Course delivery: The course registration begins as early as possible between the Institution and the student. The Institution's primary agent in this regard is the study centre tutor, who is available at least for specific week ends for tutorials and for marking all assignments. Examinations are issued and marked centrally. Some students services and counselling services, library, and other activities could be included here.

Marketing: The marketing chain includes the production of the University calendar, other brochures, and materials promotion the University's services with the purpose of entering co-operative arrangements with them for delivery of courses .

These five value activity chains are supplemented and supported by many others in the areas depicted as Support Activities in the generic chain depicted in Figure 5. The primary chains themselves can be subdivided into smaller and smaller chain activities depending on the details of analysis required.

To illustrate how value chain analysis applies at the level of functional departments, we shall use University of Ibadan or NTI Tutorial Service as examples. This department has its primary function in the Course Delivery chain but also performs some support activities through its involvement in hiring of tutors, and maintaining and developing tutorial policy. Finally, it participates in

BEST COPY AVAILABLE

the Marketing area though its field officers who contract outside agencies regarding delivery of courses. (As mentioned previously, in an organisation divided into functional departments, it is common for departmental activities to be scattered among value chains and primary and support activities).

Of course, none of these University of Ibadan or NTI chains exists in a vacuum as each affects the others. The institution is also affected by the values chains of the government, of other educational institutions, of suppliers of goods and service, etc. This is what Porter calls a value system (Porter 1985). In describing value systems, Porter highlights the relationship between the value chains of firms (or of organisations) and those of their suppliers and buyers or customers (see Figure 3).

Suppliers create value and deliver the purchase inputs to be sued in the organisation's performance vis a vis a competitor who has a different or inferior supplier. By moving to utilise or incorporate the supplier firm's design capabilities, an organisation can reach back to its suppliers' value chains to form linkages, improve response capabilities, share costs, and gain competitive advantage. Distance teaching organisations commonly do this through purchasing and adapting each other's course packages.

A channel organisation is one through which the originating organisation's product reaches the ultimate user. The channel may simply supply a service it may enhance the product. The consortia for adult education mentioned in Figure 4 solicit registrations for Distance Education Institution, provided examination invigilation services, and sometimes provide space for equipment and other essentials. The effect is to allow the Institutions to reach students they could not otherwise reach with their own resources. If we refer back to Figure 4 and note how other organisations and competitors relate to our own organisations, we can appreciate how gaining and maintaining a strong competitive position depends on understanding not only an organisation's own value chain but also how the organisation fits into the overall value system. A complete assessment of an

BEST COPY AVAILABLE

organisation's competitive position also involves understanding how rivals and other actors such as government, suppliers, and customers (students and the public) may react to its moves and how rival organisation's strategies may affect its operation through the value chain system.

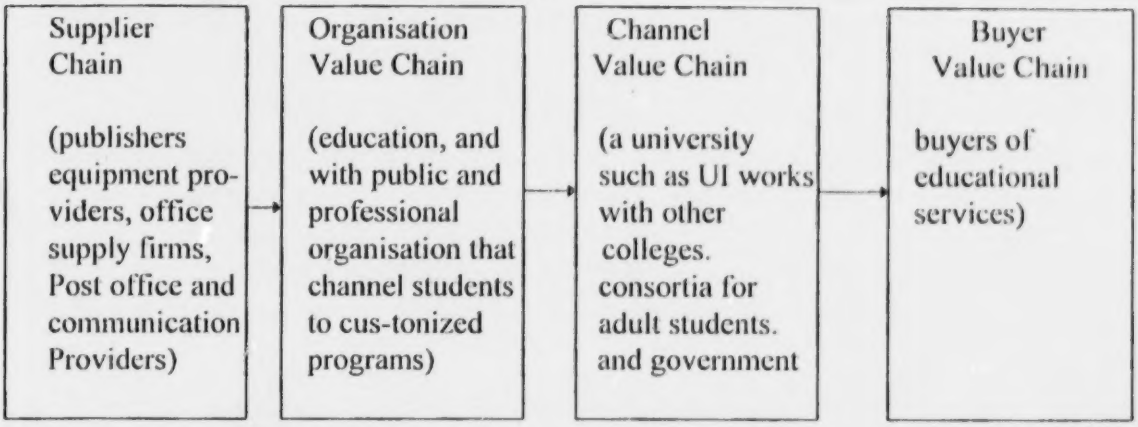
Figure 3 Application of Departmental Functions by value chains model in Distance Education Programmes.

	Inbound Logistics	Operations	Outbounds logistic	Sales and management	service
Course Development and Production	Programme and Curriculum development Research/text book review Text book and printing material purchases	Course writing and edition Composition/ artwork printing and binding			
Admissions and Credit Transfer				Admission and Records Keeping	
Course Registration and Materials Dispatch		Materials Dispatch Registration		Tutoring study center Assignment/exams marking Student/service /counselling Practical in labs for the science subjects	
Course Delivery					
Marketing				Calendar production	

Sources: adapted from the Athabasca University Value Chain.

BEST COPY AVAILABLE

Figure 4 : Distance Teaching Value System.


Supplier Chain
(publishers equipment pro-viders, office supply firms, Post office and communication Providers)
Organisation Value Chain
(education, and with public and professional organisation that channel students to cus-tonized programs)
Channel Value Chain
(a university such as UI works with other colleges. consortia for adult students. and government
Buyer Value Chain
buyers of educational services)

Delivery Cost Drivers.

Porter (1986) lists ten generic cost drivers. A cost driver is a structural factor in an organisation or its environment that influences cost. The ten generic cost drivers are;

* Economic of scales
* Learning
* The pattern of capacity utilization
* Linkages
* Interrelationships
* Integration
* Timing
* Discretionary policies
* Location
* Institutional factors.

Many of these cost drivers are relevant to the problems that Ibadan University ESP and the NTI are facing-namely the need to cut expenditures, manage "run-away" cost, improve the student successes rate. However, analysing the influence of cost drivers also resulted in uncovering opportunities for

enchancing University of Ibadan ESP or the NTI competitive position by liking its courses, programmes and systems to those of other organisations.

Conclusions and Merits of value Chain Anaylsis

In summary, the use of value chain analysis can provide a number of benefits to the management of distance education organisations. Managers using this framework are clearly encourage:

(1) To systematically consider the effects of policies, decisions, and actions on all areas of the organisation through awareness of interrelationship and linkage throughout the organisation. When these factors are considered the organisation will be much more likely to endorse the sue of cross-functional project teams.

(2) To systematically consider the effects of effects of policies and decisions on the organisation's value and potential for strategic aliases with suppliers, buyers, and even potential or current competitors.

(3) To carefully determines the cost drivers for all activities and their effect on the cost, quality and perceived value of the organisation's programmes courses, and services.

(4) To make decisions and set policies from a future-oriented perspective.

REFERENCES

(1) Duke L. (1986) The open university in the next sixteen years Open Learning. Vol. 1, No. 2.

(2) Dodds, T. (1983) Administration of Distance Teaching institution. A manual Cambridge, U.K National Extension college.

(3) Govindarajan, V. and Shank, (1988), making Strategy Explicit in Cost Analysis: A Case Study Sloan Management Review. Spring.

(4) Harris and Willaims (1978), A Handbook of Distance Education, U. K. University of Manchester Press.

(5) Kaye, Anthony & Grovile Rumble (1981), Distance teaching for Higher and Adult Education, London, Green Holm.

(6) Lumsden, B. (1986), Administrative Issues in Distance Education, Waterloo, Ontario, University of Waterloo Press.

(7) Merup, A. (1968) The computer in the administration of a correspondence school CES year book, Brussels.

(8) Murgtroyd, S. and A. Wondstra (1989) "Issues in the Management of distance education" American Journal of Distance Education Vol. 3, No. 1.

(9) Porter, M. (1985) Competitive Advantage: Creating and Sustaining Superior Performance. New York: The Free Press.

(10) Rumble, G. (1986) The Planning and Management of Distance Education, London, U. K. croom Helm.

(11) SINGH, Satoosh Kumar (1975) Development Economics: Some Findings, Lexington Mass, Hoath.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC Educational Resources Information Center
CE084314

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title:	Managing Distance Education Institutions Through Value Chain Analysis: The Nigerian Experience.
Author(s):	Professor Akintayo M.O & Dr. Aderinto, J.A.
Corporate Source:	Dept. of Adult Educ., U.I. Ibadan, Nigerian Dept. of Continuing Educ. O.A.U., Ile-Ife Nigeria.
Publication Date:	

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☑

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: Aderinto		Printed Name/Position/Title: ADERINTO, JOHN A. PHD.	
Organization/Address: Dept. of Continuing Educ. O.A.U., Ile-Ife, Nigeria.		Telephone: 234-036-233984	FAX:
		E-Mail Address: aderinto@yahoo.com	Date: 02/15/03

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:	Not Applicable
Address:	Not Applicable
Price:	Not Applicable

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:	Not Applicable
Address:	Not Applicable

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Cheryl Grossman
Processing Coordinator
ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: